STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

North Carolina Board of Transportation
Environmental Planning and Policy Committee
Meeting Minutes for June 2, 2004

A meeting of the Environmental Planning and Policy Committee (EPPC) was held June 2, 2004 at 8:30 AM in the BoardRoom (Room 150) of the Transportation Building. Nina Szlosberg chaired the meeting. Other Board of Transportation members that attended were:

Tom Betts	Doug Galyon
Conrad Burrell	Larry Helms
Bob Collier	Andy Perkins
Nancy Dunn	Lanny Wilson

Other attendees included:

Debbie Barbour	M. L. Holder	Michael Nelson
Sara Brodnax	Julie Hunkins	Ken Pace
John M. Burns	Berry Jenkins	M.A. Pettyjohn
Ken Creech	Daniel Keel	Roger Sheats
Craig Deal	Neil Lassiter	Katie Snipes
Steve DeWitt	Emily Lawton	John Sullivan
C.A. Gardner	Don Lee	Charles Tomlinson
Terry Gibson	Sharon Lipscomb	Don Voelker
Lisa Glover	April Little	Marcus Wilner
Gail Grimes	Robin M. Little	
Rob Hanson	John Long	
Drew Harbinson	Ehren Meister	
D.R. Henderson	Grady McCalliee	

Ms. Szlosberg called the meeting to order at 8:30 AM and accepted a motion to approve the meeting minutes from the May committee meeting as presented. The minutes were approved.

Stormwater management is an important issue statewide. When the NC Department of Transportation (NCDOT) does a road project and after the ditches are dug, we have limited control of what ends up in those ditches. That could change with the implementation of Phase II stormwater rules, which the legislature is now discussing. Ms. Szlosberg introduced Robin Smith, Assistant Secretary - Planning &

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Policy at the NC Department of Environment and Natural Resources (DENR) and asked her to provide an update on this topic.

Ms. Smith started by stating that Phase II stormwater is a program that does not fit North Carolina well. We have been struggling for two years to figure out how to implement it. In 1990, Congress and the Environmental Protection Agency (EPA) directed larger cities and large public entities to get stormwater permits for discharges from storm sewer or drainage systems (referred to as Phase I). Permits required at the time were what we refer to as the National Pollutant Discharge Elimination System (NPDES) -- Clean Water Act permits. Up until 1990, the only type of discharges required to have permits were wastewater and industry. The larger cities in NC and the NCDOT were required in the 1990's to get Phase I stormwater permits for the discharges from their systems. DENR is the state-implemented agency for this program.

In 1999, Congress directed EPA to require stormwater permits for the next tier of public entities, such as smaller cities and university systems -- anything that was not under Phase I. This is referred to as Phase II. (Phase I and Phase II refer to the size of the governing entity.) Phase II rules have been difficult to implement at the state level.

Post-construction stormwater management for a development and for redevelopment is a Federal requirement. The expectation is that the entities getting Phase II permits will follow design standards for new development and those standards are intended to control stormwater runoff. That was a new requirement in Phase II. EPA has told the State that as Phase I permits come up for renewal, the new requirements in Phase II will be applied to Phase I permit holders. This matters to NCDOT because the federal program did not fit North Carolina because in the 1930's, most counties across the nation decided to own and operate their own road systems. The road system and the drainage associated with the system is the major storm system in the unincorporated areas of these counties. When EPA was doing the Federal rulemaking for Phase II they assumed what is true in 48 other states, that the county governments would own and operate the storm sewer system in the unincorporated areas. In North Carolina, this is not true, as the NC Department of Transportation owns and operates most of the roads and associated drainage systems in the unincorporated parts of the counties. This has caused a fair amount of confusion. The Environmental Management Commission (EMC) spent a good amount of time trying to deal with the counties in North Carolina.

North Carolina has 33 federally designated Phase II counties. These 33 counties are subject to Phase II requirements, but for the most part, the counties do not operate the systems in the unincorporated areas.

Some of these counties operate on a self-contained system. A significant hole was left in the Phase II programs because the counties were not in a position to handle the post construction run-off controls. There are three options the counties have to get the stormwater controls that Phase II require:

1. Have the counties accomplish it under a state program
2. Have DOT take responsibility for it

3. Use the DOT Phase I permit

During rulemaking, the EMC's first choice was to have the county governments do it since they have the land use authority. The last version of the rules, ultimately what was adopted, gave controls to DENR. Requirements parallel the Phase II rule for the cities.

There are two bills pending in the legislature right now. The House and Senate each have a long and a short version. The long version is House Bill 1585, and the companion bill is Senate Bill 1210. The League of Municipalities, the Association of County Commissioners, DENR, and other environmental organizations support the bill. The short version of the bill, House 1581 and Senate 1211, leaves the issue of implementation in the counties unresolved. That is not what DENR wants, and the issue still needs to be resolved. DENR would like to be responsible with the option to delegate to the counties.

Board Member Nancy Dunn wanted to know what the cost to the counties would be. There are two answers to that question. DENR would implement the program with their staff so they would have done the permitting. If a county wanted to apply for a voluntary delegation (similar to what they do for the sedimentation program), they could. The counties support the long bill. There could be additional costs to the counties. Some Federal grants are available, but for the most part, there is no federal money at the state or local level. Nancy Dunn stated that some projects were going to be held up because of the lack of understanding of whose role it is to do what and the time required to implement Phase II once it is defined. The League of Municipalities has taken a strong position that it would be bad stormwater management to not have the unincorporated areas of the counties covered by this program. That would put the entire burden on the cities and make an ineffective program. Most of the discussions have been around who is going to implement Phase II. The longer the issued remains unaddressed, the more pressure there will be to use the NCDOT Phase I permit. Nancy Dunn wanted to know if this was holding up permits. No, the way the Phase II works is that it is directed towards local governments. The local government would in turn issue permits for specific projects. At some point DENR will get into permits for non-roads. Nina Szlosberg asked if we were in violation right now. Robin Smith responded that we are not in a happy place right now. The federal rules required that a city had to apply for a permit by March 2003. The state extended this by 18months for 60 North Carolina cities. When the rules went away, so did the extensions and the 60 cities failed to meet the deadline. North Carolina as a state failed to meet the deadline for designating Phase II communities. They are now trying to address this in the legislature process. In the meantime, North Carolina is in violation of federal requirements.

Ms. Szlosberg stated that DENR would like the EPPC's support for House Bill 1585 as it answers most procedural questions that need to be answered to get this program up and running. Phase I and Phase II permits are subject to third party enforcement and federal enforcement. There also can be pressure from agencies outside of the state. The challenge is that if this does not go our way, it could cause problems down the road. The cities and counties are on board and that often does not happen.

Governor Easley has put North Carolina on the map by signing the Smokestacks Bill which, is the most aggressive clean air bill in the country. He has made it a priority of his administration. One third of North Carolina is designated as non-attainment.

Ms. Szlosberg introduced Anne Tazewell, Coordinator for the Triangle Clean Cities Coalition. The US Department of Energy (USDOE) is sponsoring an initiative to build public-private partnerships to increase the use of alternative transportation fuels such as: biodiesel, ethanol, electricity, natural gas and propane. There are three coalitions in North Carolina -- Triangle, Charlotte and Asheville areas. These coalitions are currently based in area Council of Governments and are supported through funding provided the State Energy Office.

The USDOE Clean Cities Program was created in 1992. There have been 80 coalition established nationwide. Collectively the Clean Cities stakeholders have added more that 157,000 alternative fuel vehicles to their fleets, displacing more that 100 million gallons of petroleum. In North Carolina, the primary driver for the use of alternative fuels has been the Energy Policy Act and the Clean Cities Coalitions. This has been changing, as farmers have become more interested. Thus far, the energy policy and the Clean Cities Coalition is what has gotten the ball rolling throughout the state, in partnership with the NC Department of Administration, NCDOT, and DENR. The federal efforts include Camp Lejeune - US Marines, Seymour Johnson Air Force Base, and Cherry Point - US Marines and Butner Correctional Institution. Clean Cities is expanding to include additional petroleum displacing strategies. This includes hybrid electric vehicles, fuel economy, fuel blends and anti-idling. All of these strategies can reduce the dependence on petroleum products, as well as improve air quality. By expanding the Clean Cities' portfolio, the National Renewable Energy Lab estimates that by 2015 we can displace as much as a million gallons of petroleum a day.

Clean Cities in the Triangle have been very effective in increasing the use of alternative transportation fuels. Some of those highlights are:

- 2001 Triangle Clean Cities was designated into the national program
- 2002 Triangle J Council of Governments (TJCOG) was awarded a total of $340,000 to administer a Biofuels Program in Wake and Durham Counties.
- 2003 use of biodiesal in the Triangle grew 384% over 2002. Over 1.8 million gallons were used by stakeholders.
- 2004 TJCOG and Triangle Clean Cities launched a $100,000 Alternative Fuel Vehicles (AFV) Incentive Project to rebate costs associated with AFV's alternative fuels and refueling apparatus.

The largest biodiesel users are :

- NCDOT
- Cities of Greensboro and Raleigh
- Towns of Garner, Cary, Chapel Hill and Carrboro
- Durham Public Schools
- Raleigh Durham Airport

- Wake and Orange Counties
- NC State and Duke Universities

Biodiesel is a renewable fuel made from soy oil, cooking oil, and animal fats. It can be blended easily with diesel, is non-toxic and biodegradable, and has a 3.2 to 1 energy balance. The Biofuels Program was awarded $280,700 CMAQ funding by NC DOT with $60,000 match by NC State Energy Office (SEO) for a 3-year program. The match from the SEO allowed for dedication of $265,000 to fund entities in Wake and Durham Counties for the cost differential for E85 and biodiesel. So far, $212,359 in funding has been granted to eight entities for the use of B20. The program has been very successful in expanding use of renewable fuel and used 730,000 gallons of B20 by March 2004, reduced harmful emissions, increased awareness and built partnerships.

The Wake County Environmental Service Department was awarded $23,350 for B20 and applied for additional funds for the use of E85. Duke University was awarded $28,120 to operate 31 transit busses and 14 sanitation vehicles. NC State University received an award of $7,250 for B20 use in recycling trucks and forklifts. The Town of Cary was awarded $3,256 to use B20 in the C-Tran vehicles. Raleigh Durham Airport was awarded $17, 467 to use in 12 buses. Durham Public Schools were awarded $75,000 to use B20 in all 284 buses, and the Department of Public Instruction contributed $125,000 to make this possible.

The funds have also gone towards opening North Carolina's first two B20 pumps in Durham and Garner. The station in Garner has seen sales increases 50% to 75% over the previous months. Progress Energy helped the storeowner make the transition from traditional diesel pumps to Biodiesel.

The newest Clean Fuels Coalition in North Carolina is the Centralina Coalition. The Charlotte program plan was recently approved by DOE. Two of the three MPO's have joined as stakeholders and expect the third MPO and the RPOs to join. NC DOT used over 590,000 gallons of B20 in the region, and the City of Monroe expects to transition to B20 in the next 6 months. Fifty truck parking spaces are anticipated to be fitted with Advanced Travel Center (truck-stop) Electrification that is to be funded through a proposal that was jointly submitted by three states.

The Land of Sky Regional Council received funding in 2003 from the State Energy Office for planning and hopes to receive DOE "CC" designation in 1-2 years. The City of Asheville will receive a $400,000 grant from DENR's Division of Air Quality for a CNG station. Right now, they are showcasing a propane school bus on a national tour.

The State Energy Office is a primary support agency for alternative fuel activities. They support the Clean Cities Coalitions directly and serve as a contract agency for federal DOE SEP grants (funding for AFV activities that is only available to Clean Cities stakeholders). The Motor Fleet Management used 282,000 gallons of E85 in 2003. They operate two stations in Raleigh that offer E85 and also have one CNG and propane station. A state purchasing contract was initiated for E10 in October 2003 and used over 175,000 gallons in the first few months.

Ethanol is a renewable fuel produced by fermenting organic materials, primarily corn. It is high octane, non-toxic, water soluble, and biodegradable. Ethanol has lower life cycle greenhouse gas emissions and supports agriculture.

Nationwide there are three million flex vehicles on the road, capable of operating on E85 or gasoline. Most people are not aware that their vehicles can operate on either fuel. Some of these vehicles are: Daimler Chrysler Minivans, Dodge Stratus, Chrysler Sebring, Ford Explorer, Taurus and Supercab Ranger, Chevy Silverado, GM Suburban, Tahoe , Yukon, GMC Sierra ½ ton pickup.

The NC Department of Transportation is leading the way in regard to biodiesel use. NCDOT used 1.9 million gallons of B20 in 22 locations between September 2002 and September 2003. NCDOT is also responsible for a state-purchasing contract for biodiesel. Dozens of vehicles are also being operated on propane. NCDOT is sponsoring a study at NC State on B20 emissions in new diesel trucks and, through CMAQ funding, supporting TJCOG Biofuels Program.

Since 1993, the North Carolina General Assembly has authorized 1/64 cent per gallon of gasoline sold in North Carolina to fund the Mobile Source Emission Reduction Grant Program (approximately $800,000 annually). MSERG has funded development of CNG refueling in Garner, Greenville, Asheville, Raleigh, Greensboro, Winston Salem, Gastonia, Rocky Mount Charlotte, Hickory, Davidson and Caldwell Counties. CNG/LNG reduces emissions up to 97% for carbon monoxide and particulate matter, 75% for hydrocarbons, and 60% for nitrous oxide.

Driving a Honda Civic GX, which is a dedicated compressed natural gas vehicle, is equivalent to carpooling with 62 other occupants. Hybrid electrics slash emissions, and increase fuel economy. Newer applications of hybrids include passenger vehicles, buses, trolleys, and neighborhood electric vehicles.

Propane is a by-product of natural gas and crude oil and is the most widely used alternative fuel around the world. It has an excellent safety record. Propane is stored as a liquid, but has high amount of energy in small amount of space. The refueling infrastructure is relatively inexpensive.

Transportation is the number one source of air quality problems in North Carolina. The American Lung Association 2004 ranked three North Carolina areas in America's 25 Most Ozone Polluted Cities:

#14 Charlotte, Gastonia, Rock Hill
#16 Greensboro, Winston Salem, High Point
#23 Raleigh, Durham, Chapel Hill

Six North Carolina Counties get failing grades for particulate matter. Especially impacted by poor air quality are older adults and children with respirator problems. This situation is not likely to change due to growth and vehicle miles traveled.

The vision of Clean Cities is to reduce dependence on imported petroleum and improve air quality. The transportation sector is 97% dependent on oil. Transportation uses energy equivalent of all US oil production plus 40 % of all imports. The US has 3% of world's oil, yet we consume 25% of production. Transportation accounts for 67% of the oil used currently, and a 70% increase is expected in the next 20 years.

Nina Szlosberg adjourned the meeting. The next meeting of the Environmental Planning and Policy Committee is scheduled for Wednesday, July 7, 2004 at 8:30 AM in the Board Room (Room 150) of the Transportation Building.